FY-18 Warfighting Lab Incentive Fund Project Proposal Background and Instructions

<u>Background</u>: The Deputy Secretary of Defense (DSD) Warfighting Lab Incentive Fund (WLIF) Memo, signed 6 May 2016, established a WLIF to support the development and refinement of new Service and Joint concepts of operation (CONOPS). Per the memo, this fund will be used to support field experiments and demonstrations to take concepts from paper to real world execution. Proposals will be evaluated by Joint Staff J-7, J-8, OSD AT&L, and OSD CAPE using the following criteria directed in the DSD memo:

- Potential for disruptive innovation
- Potential to off-set key U.S. vulnerabilities
- Potential for adversary cost imposition
- Potential cost/benefit for DoD
- Amount of funding requested
- Time required to execute and generate results
- Potential for advancing US national interests
- Past performance of requesting organization

Per the DSD Memo, proposals for experimental support may be received from Service Warfighting Labs, CCMDs, Joint Staff, OSD, Defense Agencies, Federally Funded Research and Development Centers, University Affiliated Research and Development Centers and the Defense Industrial Base (DIB). All project proposals must identify a warfighting sponsor (CCMD, Service and/or Defense Agency) that will be involved in the project experimentation and/or demonstration activity, CONOPS development, and transition to operational capability. If your organization is a member of the DIB, the proposal must be submitted through, and funds will be awarded to, a warfighting sponsor.

The WLIF only uses O&M appropriations. Your organization must be able to receive and apply O&M funds to accomplish WLIF project objectives. Prior to submitting your completed project proposal, please verify that O&M funds may be used with your contracting and legal staffs. O&M appropriations expire 12 months after obligation date. WLIF project proposal periods of performance will not extend beyond 12 months timeline. All selected FY18 projects must obligate their awarded funds NLT the end of 1st quarter FY18.

If a project does not meet the requirements stated above, it may be more appropriate for other DoD Incentive funds or DoD programs. Those programs include the Wargaming Incentive Fund, Joint Capability Technology Demonstrations, and Joint Test & Evaluations.

Additional information on the WLIF can be found on the SIPR WLIF portal page located at: https://intelshare.intelink.sgov.gov/sites/joint-concepts/wlif/SitePages/Home.aspx

Instructions:

- 1. Completely fill out the WLIF Project Proposal Form. Understand the personnel evaluating the proposals may not be familiar with the details of the topic and/or systems being discussed. Avoid the use of undefined acronyms and "insider terms" as much as possible.
- 2. Route the WLIF Project Proposal Form to obtain necessary organizational digital signatures (Action Officer, O-6 POC).
- 3. Submit the completed form and any supplemental material to the following email addresses(s) NLT 1 May 2017:
 - NIPR: js.dsc.j7.mbx.wlif@mail.mil
- 4. If you have questions please feel free to contact any of the JS J-7 WLIF team at:
 - NIPR: js.dsc.j7.mbx.wlif@mail.mil

FY-18 Warfighting Lab Incentive Fund Project Proposal Project Details

Project Title: UNCLASSIFIED Short Title (5 words or less) and Long Title

Short Title:

Long Title:

Focus Areas: Please provide a list of Tier 1/2 Joint Capability Areas (JCAs) that accurately describe the focus of the project. The nine Tier 1 JCAs are provided below. A complete list of all JCAs is available on the WLIF

portal in the References folder and is include in the JSAP package as Enclosure 4.

JC A	Title	Description
1	Force Support	The ability to establish, develop, maintain and manage a mission ready Total Force.
2	Battlespace Awareness	The ability to understand dispositions and intentions as well as the characteristics and conditions of the operational environment that bear on national and military decision-making by leveraging all sources of information to include Intelligence, Surveillance, Reconnaissance, Meteorological, and Oceanographic.
3	Force Application	The ability to integrate the use of maneuver and engagement in all environments to create the effects necessary to achieve mission objectives.
4	Logistics	The ability to project and sustain a ready joint force through the deliberate sharing of national and multi-national resources to effectively support operations, extend operational reach, and provide the joint force commander the freedom of action necessary to meet mission objectives.
5	Command & Control	The ability to exercise authority and direction by a properly designated commander or decision maker over assigned and attached forces and resources in the accomplishment of the mission.
6	Communications & Computers	The ability to provide a framework for full human and technical connectivity and interoperability that allows all DOD users and mission partners to share the information they need, when they need it, in a form they can understand and act on with confidence,
7	Protection	The ability to prevent/mitigate adverse effects of attacks on personnel (combatant/non-combatant) and physical assets of the United States, allies and friends.
8	Building Partnerships	The ability to interact with partner, competitor or adversary leaders, security institutions, or relevant populations by developing and presenting information and conducting activities to affect their perceptions, will, behavior, and capabilities in order to build effective, legitimate, interoperable, and self-sustaining strategic partners.
9	Corporate Management & Support	The ability to provide strategic senior level, enterprise-wide leadership, direction, coordination, and oversight through a chief management officer function.

Project Objectives: What are you trying to accomplish? What is new in your approach? What are the material/non-material changes the project will generate?
End Products: (CONOPS, TTPs, Engineering Change Proposal (ECP), etc.)
Related Efforts: What are the ongoing/planned initiatives, e.g. JCTDs, JT&Es, Strategic Capabilities Office projects, etc., which are related to the proposed project?
Project Timeline: Please provide an estimated timeline for the major milestones within the field experiment or demonstration.
Transition Plan and Timeline: What is the transition plan for the proposed project end products? What is the estimated timeline for capability to become operational?

<u>Technology Readiness Levels (TRLs):</u> Please provide the TRLs for all the major material components of the proposed project as defined in the DoD Technology Readiness Assessment (TRA) Guidance of April 2011. TRLs can serve as a helpful knowledge-based standard and shorthand for evaluating technology maturity. The TRL definitions and descriptions are provided below:

TRL	Definition	Description
1	Basic principles observed and reported.	Lowest level of technology readiness. Scientific research begins to be translated into applied research and development (R&D). Examples might include paper studies of a technology's basic properties.
2	Technology concept and/or application formulated.	Invention begins. Once basic principles are observed, practical applications can be invented. Applications are speculative, and there may be no proof or detailed analysis to support the assumptions. Examples are limited to analytic studies.
3	Analytical and experimental critical function and/or characteristic proof of concept.	Active R&D is initiated. This includes analytical studies and laboratory studies to physically validate the analytical predictions of separate elements of the technology. Examples include components that are not yet integrated or representative.
4	Component and/or breadboard validation in a laboratory environment.	Basic technological components are integrated to establish that they will work together. This is relatively "low fidelity" compared with the eventual system. Examples include integration of "ad hoc" hardware in the laboratory.
5	Component and/or breadboard validation in a relevant environment.	Fidelity of breadboard technology increases significantly. The basic technological components are integrated with reasonably realistic supporting elements so they can be tested in a simulated environment. Examples include "high-fidelity" laboratory integration of components.
6	System/subsystem model or prototype demonstration in a relevant environment.	Representative model or prototype system, which is well beyond that of TRL 5, is tested in a relevant environment. Represents a major step up in a technology's demonstrated readiness. Examples include testing a prototype in a high-fidelity laboratory environment or in a simulated operational environment.
7	System prototype demonstration in an operational environment.	Prototype near or at planned operational system. Represents a major step up from TRL 6 by requiring demonstration of an actual system prototype in an operational environment (e.g., in an air-craft, in a vehicle, or in space).
8	Actual system completed and qualified through test and demonstration.	Technology has been proven to work in its final form and under expected conditions. In almost all cases, this TRL represents the end of true system development. Examples include developmental test and evaluation (DT&E) of the system in its intended weapon system to deter-mine if it meets design specifications.
9	Actual system proven through successful mission operations.	Actual application of the technology in its final form and under mission conditions, such as those encountered in operational test and evaluation (OT&E). Examples include using the system under operational mission conditions.

<u>Funding Mechanisms for O&M:</u> To expedite transfer and obligation of funds, please verify that your organization is ready to receive and action O&M MIPRs from OSD CAPE NLT the end of 1^{st} quarter FY18.

FY-18 Warfighting Lab Incentive Fund Project Proposal Evaluation Criteria

1.	Is there potential for disruptive innovation that replaces or eliminates a leading technology,	method or
org	ganization as a result of executing this project? If so, please describe:	

2. Is there potential for this project to contribute to **off-setting key U.S. vulnerabilities** that are reflected in the Chairman's Risk Assessment (CRA), Integrated Priority Lists (IPLs) or Comprehensive Joint Assessment (CJA)? If so, please describe.

3. Is there potential for this project to contribute to cost-imposing strategies that enhance deterrence and impose unacceptable cost on competitors? If so, please describe:
 Is there potential for this project to advance U.S. national interests that are reflected in the National
Security Strategy (NSS), National Military Strategy (NMS) or Guidance for Employment of the Force (GEF)? If so, please describe:

5. What is the potential cost/benefit for the Department? Please describe the costs and benefits of the proposed solution in addressing the warfighting problem.
6. What is the requested amount of funding? If the full amount requested is not available, would a partial amount still advance the intent of this project. Describe the impact of the project being partially funded.
Provide estimates on how funds will be allocated. (Ex. CONOPS Development: \$150k, Field Demo: \$450K)
7. Please indicate whether you are able to obligate and use FY17 funding. These funds would need to be obligated by September 30, 2017 and would expire on September 30, 2018

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